Docket No.: H0678.70008US00

## **LISTING OF THE CLAIMS**

- 1. (Previously Presented) An 802.1X protocol-based multicasting control method, comprising the following steps:
- Step 1: performing 802.1X authentication for a subscriber and storing authenticated subscriber information;
- Step 2: intercepting a request message for joining in a multicasting group sent from the subscriber;
- Step 3: obtaining a port number, a MAC address and a multicasting IP address of the subscriber from the request message;
- Step 4: searching corresponding subscriber account information in the 802.1X authenticated subscriber information according to said port number and MAC address;
- Step 5: authenticating the subscriber's account number information and the multicasting IP address, and then adding the subscriber to the multicasting group if the authentication is passed successfully; otherwise rejecting the subscriber's request.
- 2. (Previously Presented) The 802.1X protocol-based multicasting control method according to claim 1, wherein in step 5, an authentication server at 802.1X authentication end is used to authenticate the subscriber's account number information and the multicasting IP address.
- 3. (Previously Presented) The 802.1X protocol-based multicasting control method according to claim 1, wherein in step 5, the authentications of the subscriber's account number and the

multicasting IP address are implemented through verifying whether the multicasting IP address is authorized to receive said account number information.

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4. (Previously Presented) The 802.1X protocol-based multicasting control method according to claim 1, wherein if said 802.1X authentication is based on port, when a subscriber attached to said port makes a request for joining in a multicasting group, the subscriber's MAC address is searched for first; if said MAC address is found, the subscriber's account number information is searched for according to said MAC address and said port number;

if said 802.1X authentication is based on MAC, when a subscriber attached to said port makes a request for joining in a multicasting group, the subscriber's account number information is searched for directly according to the subscriber's MAC address and the port number.

5. (Previously Presented) The 802.1X protocol-based multicasting control method according to claim 1, 2, 3 or 4, wherein the subscriber joins in the multicasting group through IGMP protocol.